

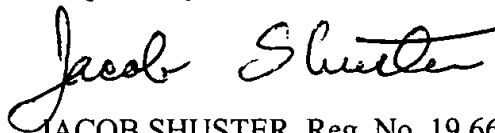
REMARKS

In response to the first Office action on the merits, the foregoing amendment to renumbered claims 1-8 is submitted in an effort to place the application in condition for allowance. Toward that end, claim 4 has been cancelled and claims 1-3 and 5-8 rewritten so as to emphasize the patentable distinctions over the prior art of record applied thereto. Favorable reconsideration is therefore requested for reasons which follow.

Claims 1, 5 and 7 from which the other claims 2, 3, 6 and 8 depend, overcome the rejections under 35 U.S.C. 103(a) as stated in the Office action based on the Nakamori et al, Zurecki et al. and Long et al. patents of record, alternatively relied on as the primary art reference, in view of the Combs patent of record relied on as a secondary prior art reference. The Examiner expressly concedes that such primary prior art references fail to disclose an "Ospray" technique for atomizing an alloy, involving casting of the alloy onto a substrate surface. Such primary references furthermore fail to suggest formation of the alloy coating in such a manner as to increase its strength while maintaining ductility. As to the teachings in the Combs patent relied on as the secondary reference, it fails to teach use of an atomizing technique applicable to alloys having a high content chromium in order to both maintain ductility and achieve a high strength property as claimed. Therefore, the rejections of claims 1-3 and 5-8 as stated are improperly based on hindsight derived from the disclosure in the present application, rather than a judgment of obviousness under 35 U.S.C. 103(a) based on teachings expressed in the secondary reference relied on according to current case law.

In view of the foregoing, favorable reconsideration with respect to amended claims 1-3 and 5-8 and an allowance based on such claims is expected in due course.

Respectfully submitted,

A handwritten signature in cursive script that reads "Jacob Shuster".

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MARKED-UP VERSION OF AMENDMENTS
TO THE CLAIMS

Rewrite claims 1-3 and 5-8 as follows:

1. (Amended) In a method of producing a ductile alloy having a base metal by casting a molten stream as a spray of droplets onto a surface; the improvement residing in: selecting a corrosion resisting material as a component forming a high content of the alloy which is exclusively limited to said component and the base metal for deposit onto said surface; and utilizing an inert cover [as a component of the alloy exclusively limited thereto with the base metal for deposit onto said surface; and utilizing nitrogen as a cover] gas for mixing of said component with the base metal and for atomization of the molten stream to endow the ductile alloy with high strength upon said casting thereof onto the surface.
2. (Amended) The method as defined in claim 1, wherein said [base] metal is nickel and the corrosion resisting material [of] forming the component is chromium constituting between 48% and 52% of weight of the alloy as the high content thereof.
3. (Amended) The [In a] method as defined in claim 2, [of producing an alloy with improved strength exclusively formed from nickel and chromium mixed under cover of an inert gas, by casting of a molten alloy stream onto a surface, the improvement] further including: selection of [residing in: selecting] nitrogen as the inert gas; pressurizing said inert gas [for atomization of the molten alloy stream into spray droplets;] and directing jets thereof [of the pressurized inert gas] into said molten alloy stream for effecting said atomization and deposit onto the surface.

5. Amended) In a method of casting a ductile alloy having a base metal by heating thereof to produce a molten stream that is atomized into a spray of droplets directed onto a moving substrate surface; the improvement residing in: selecting a corrosion resisting material as a component of the alloy undergoing said heating; exclusively limiting said alloy to the base metal and the corrosion resisting material; and utilizing an inert cover [nitrogen] gas to atomize the molten stream into said spray of droplets for deposit onto said surface [and] to increase in strength the ductile alloy.
6. (Amended) The method as defined in claim 5, wherein said base metal is nickel, [and] the corrosion resisting material is chromium and the inert cover gas is nitrogen.
7. (Amended) In a method of producing an alloy formed exclusively from a base metal and a corrosion resisting component [respectively exhibiting high strength and high ductility properties when] deposited onto a moving substrate surface, the improvement residing in: limiting the alloy exclusively to said base metal and the corrosion-resisting component; and forming the alloy by spray casting under exposure to an inert cover [nitrogen] gas for said deposit onto said surface to thereby exhibit high strength while maintaining ductility.
8. (Amended) The method as defined in claim 7 [6], wherein said base metal is nickel, [and] said corrosion-resisting component is chromium and said inert cover gas is nitrogen.